

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	10/597,233	OISHI, KEIICHIRO
	Examiner	Art Unit
	Alexander Polyansky	1735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTO-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 1/31/2011.
2.  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
3.  The allowed claim(s) is/are 1-17 and 19-114.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_.

/Alexander Polyansky/  
Examiner, Art Unit 1735

/JESSICA L. WARD/  
Supervisory Patent Examiner, Art Unit 1735

## **DETAILED ACTION**

Claims 1-17 and 19-114 are pending. Claims 7-17, 19-21, 33-62, 67-80, 85- 89, 93-97, 99-101, 103-105 and 107-109 have been withdrawn. Claims 1 and 7 have been amended. Claims 111-114 are new.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 31, 2011 has been entered.

### ***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

Claim 1 is allowable over the cited prior art because the cited prior art does not teach or suggest a copper alloy material in wire or bar form, wherein the copper alloy material comprises a composition including 0.6 to 3 mass% Sn, and wherein the copper alloy material has a phase structure including an  $\alpha$  phase, a  $\delta$  phase, and a  $\gamma$  phase, and the total area ratio of the  $\alpha$ ,  $\delta$ , and  $\gamma$  phases is 95 to 100%.

Claim 7 is allowable over the cited prior art because the cited prior art does not teach or suggest a copper alloy material in wire or bar form, wherein the copper alloy material comprises a composition including 0.6 to 3 mass% Sn, and wherein the copper alloy material has a phase structure including an  $\alpha$  phase, a  $\delta$  phase, and a  $\gamma$  phase, and the total area ratio of the  $\alpha$ ,  $\delta$ , and  $\gamma$  phases is 95 to 100%.

Claim 20 (method claim) is allowable because it depends off claim 7 thus contains all the features of the allowable claim.

*Rejoinder*

Claims 1-6, 22-32, 63-66, 81-84, 90-92, 98, 102, 106 and 110 are directed to an allowable product. Pursuant to the procedures set forth in MPEP § 821.04(B), claims 7-17, 19-21, 33-62, 67-80, 85- 89, 93-97, 99-101,103-105 and 107-109, directed to a similar product and the process of making an allowable product, previously withdrawn from consideration as a result of a restriction requirement, claims 7-17, 19-21, 33-62, 67-80, 85-89, 93-97, 99-101,103-105 and 107-109 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

Because all claims previously withdrawn from consideration under 37 CFR 1.142 have been rejoined, **the restriction requirement as set forth in the Office action mailed on August 17, 2009 is hereby withdrawn.** In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

*Prior Art*

Oishi teaches a copper alloy material in wire form (title, abstract, and claims 1-5) comprises a composition that overlaps the claimed composition.

Oishi does not teach the weight% of Si as recited in claim 1.

Furukawa teaches a copper alloy (abstract), wherein Furukawa added <1% Si (title and abstract). It would be obvious to incorporate less than 1% Si of Furukawa in Oishi's steel to increase the corrosion resistance of the copper alloy (Furukawa title and abstract).

Oishi in view of Furukawa does not teach the weight% of Al as recited in claim 1.

Hasegawa teaches a copper alloy (abstract), wherein Hasegawa added 0.05-0.5% Al (title and abstract). It would be obvious to incorporate 0.05-0.5% Al of Hasegawa in Oishi's steel in order to inhibit a dezincification phenomenon (Hasegawa title and abstract).

None of Oishi, Furukawa, or Hasegawa teaches the  $\alpha$ ,  $\gamma$ , and  $\delta$  phases or the range of 95 to 100%. Hasegawa does not teach the range for Sn since Hasegawa warns that if Sn is higher than 0.4 wt% its effect becomes saturated and its processability is damaged (translated Hasegawa page 6, par. 2).

The Applicants are able to accomplish the specific phase distribution of  $\alpha$ ,  $\gamma$ , and  $\delta$  phases based on the process taught in the instant spec (pages 54-55). The method includes a number of hot extrusion and cold wiredrawing steps with intermediate annealing that allows for the alloy to be plastic processed from 100 mm in diameter to 4 mm.

None of Oishi, Furukawa, or Hasegawa teach the specific method discussed at said pages 54-55 to obtain the specific phase distribution of  $\alpha$ ,  $\gamma$ , and  $\delta$  phases.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Polyansky whose telephone number is (571)270-5904. The examiner can normally be reached on Monday-Friday, 8:00 a.m. EST - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica L. Ward can be reached on 571-272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Polyansky/  
Examiner, Art Unit 1735

/JESSICA L. WARD/  
Supervisory Patent Examiner, Art Unit 1735